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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/045,815	10/26/2001	Renu Wadhwa	06501-091001 / C1-104PCT-	2880
26161	7590	06/02/2004	EXAMINER	
FISH & RICHARDSON PC 225 FRANKLIN ST BOSTON, MA 02110			YU, MISOOK	
			ART UNIT	PAPER NUMBER
			1642	

DATE MAILED: 06/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center">Office Action Summary</p>	Application No. 10/045,815	Applicant(s) WADHWA ET AL.	
	Examiner MISOOK YU, Ph.D.	Art Unit 1642	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-23 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____. | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
6) <input type="checkbox"/> Other: _____. |
|---|--|

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-8, 11, 12, and 15 in part, drawn to SEQ ID NO:1 or variant thereof, vector, transformed cell, method of producing protein encoded by SEQ ID NO:1, classified in class 536, subclass 23.1, class 435, subclass 69.1, and 320.1 .
- II. Claims 1-8, 11, 12, and 15 in part, drawn to SEQ ID NO:3 or variant thereof, vector, transformed cell, method of producing protein encoded by SEQ ID NO:3, classified in class 536, subclass 23.1, class 435, subclass 69.1, and 320.1 .
- III. Claims 1-8, 11, 12, and 15 in part, drawn to SEQ ID NO:5 or variant thereof, vector, transformed cell, method of producing protein encoded by SEQ ID NO:5, classified in class 536, subclass 23.1, class 435, subclass 69.1, and 320.1 .
- IV. Claims 1-8, 11, 12, and 15 in part, drawn to SEQ ID NO:7 or variant thereof, vector, transformed cell, method of producing protein encoded by SEQ ID NO:7, classified in class 536, subclass 23.1, class 435, subclass 69.1, and 320.1 .
- V. Claims 9, and 10 in part, drawn to SEQ ID NO:2, classified in class 530, subclass 350.

- VI. Claims 9, and 10 in part, drawn to SEQ ID NO:4, classified in class 530, subclass 350.
- VII. Claims 9, and 10 in part, drawn to SEQ ID NO:6, classified in class 530, subclass 350.
- VIII. Claims 9, and 10 in part, drawn to SEQ ID NO:8, classified in class 530, subclass 350.
- IX. Claims 13, and 14 in part, drawn to antibody to SEQ ID NO:2, classified in class 536, subclass 387.1.
- X. Claims 13, and 1 in part, drawn to antibody to SEQ ID NO:4, classified in class 536, subclass 387.1.
- XI. Claims 13, and 14 in part, drawn to antibody to SEQ ID NO:6, classified in class 536, subclass 387.1.
- XII. Claims 13, and 14 in part, drawn to antibody to SEQ ID NO:8, classified in class 536, subclass 387.1.
- XIII. Claims 16, and 17 in part, drawn to method of screening a compound that binds to SEQ ID NO:2 protein, classified in class 435, subclass 4.
- XIV. Claims 16, and 17 in part, drawn to method of screening a compound that binds to SEQ ID NO:4 protein, classified in class 435, subclass 4.
- XV. Claims 16, and 17 in part, drawn to method of screening a compound that binds to SEQ ID NO:6 protein, classified in class 435, subclass 4.
- XVI. Claims 16, and 17 in part, drawn to method of screening a compound that binds to SEQ ID NO:8 protein, classified in class 435, subclass 4.

- XVII. Claims 20, and 21 in part, drawn to method of screening a compound that suppress or promotes expression of SEQ ID NO:1 or variant thereof , classified in class 435, subclass 6.
- XVIII. Claims 20, and 21 in part, drawn to method of screening a compound that suppress or promotes expression of SEQ ID NO:3 or variant thereof , classified in class 435, subclass 6.
- XIX. Claims 20, and 21 in part, drawn to method of screening a compound that suppress or promotes expression of SEQ ID NO:5 or variant thereof , classified in class 435, subclass 6.
- XX. Claims 20, and 21 in part, drawn to method of screening a compound that suppress or promotes expression of SEQ ID NO:7 or variant thereof , classified in class 435, subclass 6.
- XXI. Claims 18, 19, 22, and 23, drawn to a compound, unclassifiable due to an unknown nature of the compound.

The inventions are distinct, each from the other because of the following reasons:

Inventions I-XII, and XXI are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are different products. Each of the proteins in invention groups V-VIII has different molecular structures as evidenced by different SEQ ID NOs and different functions as disclosed at page 2 of the specification. Each of the nucleic acid molecules (invention groups I-VI) encoding the different

proteins is therefore different invention and the antibodies binding to the different proteins are also different inventions. A compound in invention group XXI is considered unrelated because it does not appear to share any structure or function with any of the invention groups of 1-XX.

Inventions I and XVII are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed can be used in a materially different process such as making a transgenic animal.

Inventions II and XVIII are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed can be used in a materially different process such as making a transgenic animal.

Inventions III and XIX are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different

process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed can be used in a materially different process such making a transgenic animal.

Inventions IV and XX are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed can be used in a materially different process such making a transgenic animal.

Inventions V and XIII are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed can be used in a materially different process such as making an antibody.

Inventions VI and XIV are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed can be used in a materially different process such as making an antibody.

Inventions VII and XV are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the

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process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed can be used in a materially different process such as making an antibody.

Inventions VIII and XVI are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed can be used in a materially different process such as making an antibody.

These inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification. The search required for each of the above inventions is not coextensive with regard to the literature and the sequence searches. Further, a reference which would anticipate the invention of any one group would not necessarily anticipate or make obvious the any of the other groups. For these reasons, restriction for examination purposes is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim

remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MISOOK YU, Ph.D. whose telephone number is 571-272-0839. The examiner can normally be reached on 8 A.M. to 5:30 P.M., every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina C Chan can be reached on 571-272-0841. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MISOOK YU, Ph.D.
Examiner
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A handwritten signature in cursive script, appearing to read "Misook Yu", is positioned below the printed name and title.